

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009311**Date Inspected:** 29-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Xu Xian Ping		
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>

<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Component:</b>	OBG & TOWER Components		

**Bridge No:** 34-0006**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

**BAY 1**

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #001 located on Counter Weight CW001A – PP076. Welder is identified as 219189. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

**BAY 2**

This QA Inspector observed the following work in progress:

SMAW process Tack welding of weld joint # 028 located on Floor Beam FB3047 – 001. Welder is identified as 049972. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

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FCAW process welding of weld joint #045 located on Floor Beam FB3055 – 001. Welder is identified as 206358. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

FCAW process welding of weld joint #036 located on Floor Beam FB3053 – 001. Welder is identified as 045203. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

FCAW process welding of weld joint #050 located on Floor Beam FB3089 – 001. Welder is identified as 203871. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

SAW process welding of weld joint #009 located on Super (Deck) Panel 10BW – SEG61. Welder is identified as 250050. ZPMC QC is identified as Xiang Feng Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

### BAY 3

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #098 located on CSD3 – PP098. Welder is identified as 208035. ZPMC QC is identified as Yin Dong Hai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

FCAW process welding of weld joint #033 located on X-37 stiffener CA088. Welder is identified as 044790. ZPMC QC is identified as Yin Dong Hai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2233 – Tc – U4b – F.

FCAW process welding of weld joint #102 located on CSD3 – PP098. Welder is identified as 208035. ZPMC QC is identified as Yin Dong Hai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

### BAY 5

#### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. BK001 – 020 – 048; 049
2. BK001 – 037 – 033; 040; 041; 042; 052; 061; 062; 063

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3. BK001 – 038 – 033; 040; 041; 042; 052; 061; 062; 063
4. BK001 – 039 – 033; 040; 041; 042; 052; 061; 062; 063
5. BK001 – 040 – 033; 040; 041; 042; 052; 061; 062; 063
6. BK001 – 041 – 033; 040; 041; 042; 052; 061; 062; 063

BAY 6

### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as TOWER Components. The weld designations reviewed are as follows:

WEST TOWER LIFT 1 – 119 M DIAPHRAGM – GREEN TAG # 009250

1. WSD1 – DPSA4 – 10A/B – 3 ~ 8
2. WSD1 – DPSA4 – 10B/B – 1; 26
3. WSD1 – SA4 – 50 – 3 ~ 8
4. WSD1 – DPSA4 – 10B/B – 2; 27
5. DPSA4 – 10 – (AFTER BASE METAL REPAIR)

### Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as TOWER Component. The weld designations reviewed are as follows:

WEST TOWER LIFT 1 – 119 M DIAPHRAGM – GREEN TAG # 009250

1. DPSA4 – 10 – (AFTER BASE METAL REPAIR)

Cross Beam – 8

This QA Inspector observed the following work in progress:

SMAW process Tack welding of weld joint #092 located on Cross Beam CB202G – 020. Welder is identified as 070007. ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

FCAW process welding of weld joint #147 located on Cross Beam CB202G – 019. Welder is identified as 220068.

ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

SMAW process Tack welding of weld joint #094 located on Cross Beam CB202G – 020. Welder is identified as 070007. ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

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documents.

### Summary of Conversations:

No Relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Kumar,Sandeep	Quality Assurance Inspector
<b>Reviewed By:</b>	Whitehead,Lonnie	QA Reviewer

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